Electro-Optics Sensors and Subsystems (Lab Testing)

RTTC's "world class" Electro-Optics laboratory test capabilities provide state-of-the-art facilities and resources for performing First Article Tests (FATs); Pre-Production Qualification Tests (PPQTs); Performance, Reliability, and Verification Tests (PRVTs); Stockpile Reliability Tests; Periodic Production Inspections (PPIs); and Engineering Evaluation and Exploitation. All Electro-Optical (EO) spectrums are covered within UV, visible, near Infrared (IR), mid-wave IR, and long-wave IR wavebands for imaging and nonimaging applications.

Primary Services and Capabilities

- Missile seeker testing
- Reconnaissance sensor testing
- Surveillance sensor testing
- Target acquisition sensor testing
- Laser rangefinder and designator testing
- Hardware-in-the-Loop (HWIL) Testing
- Electronics testing
- Modeling and Simulation (M&S)
- All-up-round test sets
- Lens, mirrors, and optical component tests
- Laser damage threshold tests


Dynamic IR Scene Projector (DIRSP)


EO Sensor Flight Evaluation Lab (EOSFEL)


Scene generation monitors (VPG)


Multi-Axis Motion Simulator (MAMS)


EO Counter-Countermeasure Station

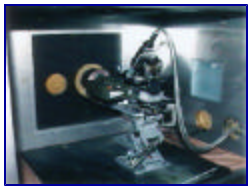

TOW ITAS Test Station

Supplementary Services

- Design and fabricate specialized test instrumentation
- Platform/missile/target acquisition system intraoperability
- All labs have the capability of distributed testing across a fiber optic network such as the Defense Research & Engineering Network (DREN)
- Functional test set design and fabrication

Specialized Facilities and Equipment

- EO Reconnaissance, Surveillance, and Target Acquisition (RSTA) sensor evaluation labs
- EO seeker/guidance section evaluation labs
- Automated Laser Instrumentation and Measurement System (ALIMS)
- Dynamic Infrared Scene Projection (DIRSP) systems
- IR Scene Projector (IRSP)
- Dynamic visible scene projection technology
- Missile and target simulators
- Real-time EO/IR scene generation and image processing with High Performance Computer (HPC)
- Library of real and synthetic Virtual Proving Ground (VPG) Tools
- Electro-Optical Counter-Countermeasure (EOCCM) station
- Extreme temperature conditioning capabilities
- Multi-Spectral Facilities
- Mobile Infrared Scene Projector (MIRSP)


Automated Laser Instrumentation Measurement System


EO Laboratory


EOCCM

Click here for a printable version of this page.
Adobe Acrobat Reader is required.

Back to Top

Please read this Privacy & Security Notice

Last updated January 2, 2002

Please send questions or comments about this page to webmaster@rttc.army.mil